

## APPENDIX A

### Analysis of Capital Costs of Originally Proposed Full Service Hospital

#### A. Construction Costs and District Share of Project

The total cost of the original proposed full service hospital is \$444.406 million, which includes \$30 million and associated soft costs for an underground parking garage. The OCFO finds these cost estimates to be reasonable. The District's share of the project cost was proposed at \$212.168 million.

The parties agreed to an Initial Contribution in FY2006 of \$5.4 million for Project Costs required to complete the Planning and Pre-Construction Financing Phases of the Project. Each party's portion of Construction Funding -- \$190.968 million minus the Initial Funding Period amount of \$5.4 million -- would be deposited in the Escrow Account on the Construction Phase Commencement Date, which is anticipated to occur in FY 2007.

NATIONAL CAPITAL MEDICAL CENTER ADJUSTED COST ESTIMATE - SHARED COSTS			
Cost Basis	Bldg Area	Unit Cost	Consensus Cost Estimate Estimated Cost
Streetscape Allowance	14 Acres		\$2,000,000
Parking Garage	1000 spaces	\$30,000 per space	\$30,000,000
Hospital - 250 Beds	600,000 SF	\$325 per square foot	\$195,000,000
<b>TOTAL - Estimated Construction Cost:</b>			<b>\$227,000,000</b>
Architecture/Engineering Fees	10%	\$22,700,000	
Equipment: Hospital	35%	\$68,250,000	
Furniture, Fixtures & Equipment	7%	\$13,650,000	
Owner Administration	1.50%	\$3,405,000	
<b>TOTAL - "Soft" Cost</b>			<b>\$108,005,000</b>
<b>PROJECT TOTAL (2005\$)</b>			<b>\$335,005,000</b>
Consensus Inflation to 2007	20%		\$67,001,000
<b>Project total (2007\$)</b>			<b>\$402,006,000</b>
Design contingency	19%		\$42,400,000
<b>Project Total with contingency (2007\$)</b>			<b>\$444,406,000</b>
50% of Project Total			\$222,203,000
Additional District Project Costs (Taken from contingency)			(\$10,035,000)
<b>District's Share of Project Costs</b>			<b>\$212,168,000</b>
Net Available contingency			\$32,365,000
* Does not include financing costs			

#### Site Preparation and Infrastructure Costs

The District would be responsible for a \$21.59 million expenditure on site preparation and infrastructure costs associated with development. These costs are identified in the table on page 4.

The total cost of the project is \$444.406 million, which includes \$30 million and associated soft costs for an underground parking garage. The OCFO finds these cost estimates to be reasonable. Fifty percent of the total project cost is \$222.2 million. However, the District's share of the project cost included in the proposed Exclusive Rights Agreement (ERA) is \$212.168 million

based on 50 percent of an earlier project cost (including contingency) of \$424.3 million, which includes \$15 million for above ground parking. The City Administrator's office indicates that the additional \$10 million in District project costs would be covered within the existing contingency fund. This issue will be discussed in more detail in the section on the contingency.

According to the ERA, the District would provide and disburse its share of funds for Project Costs through the terms of the Grant Agreement. The Grant Agreement indicates that the parties agreed to an Initial Contribution amount of \$5.4 million for Project Costs required to complete the Planning and Pre-Construction Financing Phases of the Project. The entire \$5.4 million would be deposited in the Escrow Account within 90 days of Council approval of the project, which was anticipated to occur in FY 2006.

Project Cost Allocation (\$ in Millions)					
Deposits into Escrow Account	FY 2006	FY 2007	FY 2008	FY 2009	Four Year Total
Initial Funding Period	5.40	-	-	-	5.40
Construction Funding	-	185.57	-	-	185.57
Contingency Funding	-	21.20	-	-	21.20
Total Deposits	5.40	206.77	-	-	212.17

Under the Grant Agreement each party's portion of Construction Funding -- \$190.968 million minus the Initial Funding Period amount of \$5.4 million -- would be deposited in the Escrow Account on the Construction Phase Commencement Date, which was anticipated to occur in FY 2007.

The Grant Agreement indicates that each party's portion of the Contingency Funding must be deposited in the Escrow Account on the Construction Phase Commencement Date, if required by the terms of the FHA mortgage insurance or other credit enhancement that Howard University would pursue. The above allocation assumes that the Contingency Funding would be deposited in FY 2007 to ensure that adequate funding is available in the event that it is required.

The project cost estimate was developed through a consensus process involving Turner/Tompkins construction and BE&K. The costs include the following components:

- Construction of a 600,000 square foot hospital estimated at \$325 per square foot totaling \$195 million.
- Construction of an underground parking garage totaling \$30 million, based on 1,000 spaces at \$30,000 per space.
- A streetscape allowance of \$2 million.
- Architecture and engineering costs of \$22.7 million assumed to be 10 percent of the total hard costs.
- Hospital equipment costs of \$68.25 million assumed to be 35 percent of hospital construction costs.

- Furniture, fixtures and equipment costs of \$13.65 million assumed to be 7 percent of hospital construction costs.
- Owner administration costs of \$3.4 million assumed to be 1.5 percent of total hard costs.
- A contingency of \$42.4 million, which is 19 percent of the total hard costs including the underground parking garage.

Total project costs above are inflated from 2005 dollars to 2007 dollars based on an estimate of 10 percent inflation per year. This estimate is consistent with current trends. According to the Engineering News-Record in 2005, nationally, construction materials costs increased 6.4 percent. DC's inflation rates typically run half a point to a point higher than national inflation rates. According to Global Insights, total wages in the construction sector in the District of Columbia are projected to grow at an average annual rate of 9.3 percent between 2006 and 2010.

#### *B. Site Preparation and Infrastructure Costs*

The site preparation and infrastructure costs are estimated in conjunction with the Anacostia Waterfront Corporation. The estimates are based on the "Reservation 13 Infrastructure Cost Estimate" prepared by EEK Architects and G&O Consulting Engineers with professional quality assurance by Accucost Inc. The estimates also draw on "Reservation 13 Concept and Grading and Infrastructure Layout" prepared by G&O and "Reservation 13 Phase I Environmental Analysis" prepared by G&O.

All of these studies were conducted on the entire Reservation 13 site. The costs have been allocated to the hospital portion using several factors:

- The buildings that need to be demolished,
- The hazardous material on the site that is identified and requires remediation,
- The streets and right of ways that are on the site,

- Site demolition and site grading costs that are allocated to the hospital based on the hospital's share of the total Reservation 13 site.

NCMC Site Preparation and Infrastructure Costs* (Millions of dollars)					
Item	FY 2006	FY 2007	FY 2008	FY 2009	4-Year Total
Hazardous Material Demolition*	1.93	-	-	-	1.93
Building Demolition	2.55	-	-	-	2.55
Non-Building Related Hazardous Material Demolition*	0.61	-	-	-	0.61
Site Demolition	0.71	-	-	-	0.71
Site Grading	-	1.93	-	-	1.93
New Street Construction	-	4.74	-	-	4.74
Metro Streetscape Improvements	-	1.93	-	-	1.93
Street Lighting	-	0.26	-	-	0.26
Project Soft Costs	-	3.96	-	-	3.96
Project Contingency	-	2.97	-	-	2.97
Total	5.81	15.79	-	-	21.59
Notes: *FY 2004 costs inflated by 10% per year (Hazardous material demolition costs were re-estimated in FY 2006 dollars). **The estimates related to hazardous material removal do not include soil remediation expenses.  Sources: The site preparation and infrastructure costs are based on estimates developed in conjunction with the Anacostia Waterfront Corporation. The estimates are based on the "Reservation 13 Infrastructure Cost Estimate" prepared by EEK Architects and G&O Consulting Engineers with professional quality assurance by Accucost Inc. The estimates are also based on "Reservation 13 Concept and Grading and Infrastructure Layout" prepared by G&O and "Reservation 13 Phase I Environmental Analysis" prepared by G&O.					

The estimates were originally prepared in 2004. The initial estimates are adjusted by 10 percent per year to reflect construction-related inflation. This estimate is reasonable if current trends continue.

The costs are allocated to fiscal years by the current project schedule. The items allocated to FY 2006 relate to preparing the site including demolishing structures and site remediation. The items allocated for FY 2007 are site improvement costs. Hazardous material removal is based on the findings of the "Reservation 13 Phase I Environmental Analysis" which covers environmental issues in the above ground structures such as asbestos and lead.

The estimates related to hazardous material removal do not include soil remediation expenses. The Anacostia Waterfront Corporation is in the process of establishing a cost model for soil remediation expenses that should be completed in the next three to four months.

In the meantime existing environmental studies of the surrounding area have been reviewed to assess the potential for soil contamination and any other unknown issues. Since each site on Reservation 13 is unique and the proposed hospital site contains the DC General Hospital buildings, the review of studies from other parts of Reservation 13 cannot provide a definitive assessment of the environmental conditions.

Studies that were conducted in anticipation of the development of St. Coletta's school on site A, adjacent to the proposed hospital site, are a primary source of environmental information. Site A is quite different from Sites B and C because, prior to construction, the site was occupied by an asphalt parking lot with concrete islands. Thus it is less likely to have medically generated environmental wastes. A concrete Helicopter landing pad and electric transformer were located in the northeast corner. The site included a grass open field and scattered matured trees mostly to the north and east of the property.

The DC Department of Health conducted an environmental assessment of the Saint Coletta School project and concluded:

“The Department of Health, a reviewing agency pursuant to the Environmental Policy Act and its implementing regulations, recommends to the Department of Consumer and Regulatory Affairs that the Saint Coletta School project does not require the preparation of an environmental impact statement. Our recommendation is based on the fact that none of our reviews have identified any significant adverse impact or the likelihood of substantial negative impact to the environment as a result of the proposed project.”

The DC Department of Housing and Community Development also assessed the St. Coletta's site and “determined that this project will have no significant impact on the human environment.”

## Summary of Other Issues

### *Contingency Review*

The design contingency in the original project estimate was 20 percent of the estimated construction costs. The contingency is currently 19 percent of total construction costs due to the addition of underground parking to the total construction costs. D.C. would be exposed to possible expenditure of \$10.035 for the additional cost of underground parking. If the contingency is used to cover the District's share of this increase, then the contingency drops to \$32.4 million, or 14 percent of the construction costs.

<b>Contingency Review</b>	
Total Construction Costs	227,000,000
Contingency	42,400,000
Contingency as a Percent of Total Construction Costs	19%
DC Portion of Additional Parking Costs	10,035,000
Contingency Balance if Used to Cover Additional Parking Costs	32,365,000
Contingency Balance as % of Total Project Costs	14%

### *Cap on District Cost Obligation*

There are several different references to the cap on the District's cost obligation in the proposed ERA and Grant agreement. There are also documents that have not yet been finalized that may include language related to the cap on the District's cost obligation, such as the Financing Commitment from FHA to provide mortgage insurance on the project. The OCFO recommends ensuring that the language in each of these documents is consistent with respect to the hard cap on the District's cost obligation.

The Attorney General's office has indicated that the District's financial obligation would be fixed at a definite limit pursuant to section 4.5.3(i) of the ERA which states "Notwithstanding the foregoing, the District's share of Project Costs shall not exceed \$212,168,000."

This interpretation indicates that section 4.5.3(i) takes precedence over section 4.5.3(ii) that states:

"If the Guaranteed Maximum Price increases the Project Costs to an amount in excess of the estimate stated in (i) above, the District and Howard shall attempt to negotiate adjustments to the Preliminary Plans and/or the Development Agreement that are mutually acceptable to Howard and the District and that bring the Project Costs down to an amount funded by the District and the Howard on a 50/50 basis. If they are unable to agree upon such a plan, either party may terminate this agreement."

Sections 4.5.3(i) and section 4.5.3(ii) appear somewhat inconsistent because the language in section 4.5.3(ii) indicates that District and Howard could negotiate adjustments to the Preliminary Plans and/or Development Agreement that result in the total costs exceeding the original plan, as long as the costs are shared on a 50/50 basis. The CFO recommends amending the language in Section 4.5.3(ii) to clarify that this section would not allow the District's obligation to exceed the cap.

The proposed Grant Agreement also includes language related to the cap on the District's obligation. The Grant Agreement defines "Grant" to mean "the funds to be deposited by the District in the Escrow Account or credited to the District's share of the Project Costs, as set forth in Article II of this Agreement. The Grant is capped at a Total Contribution Obligation of \$212,168,000."

Section 5.3 of the Grant Agreement entitled "Conflicts" notes: "In the event of any conflict or inconsistency between the provisions of this Agreement, the Development Agreement, and the Financing Commitment, the Financing Commitment shall prevail to the extent applicable." The Financing Commitment document has not yet been finalized. This document will need to include language specifically referencing the cap on the District's obligation to ensure that there are no future inconsistencies in the agreement.

### *Timing of the Distribution of Funds*

The proposed Grant Agreement calls for the establishment of an Escrow Account for the deposit of funds by the District and Howard University to pay for the construction of the hospital. Section 2.7 of the Grant Agreement indicates that “The earnings on the Escrow Account shall be credited equally to the District and Howard.”

The Grant Agreement requires the District and Howard to deposit the bulk of the funding, \$185.57 million of the District’s \$212.17 million, on the Construction Phase Commencement Date. Additionally, for the Initial Funding Period the District and Howard each deposit \$2.7 million within 30 days of Council approval of the agreement and the remaining \$2.7 million within 90 days of Council approval of the agreement. The Contingency Funding must be deposited within 10 business days of the receipt of the written demand of the deposit of the Contingency Funding Amount from the Escrow agent.

Due to these provisions it would be prudent for the District to make each deposit into the Escrow account on the same day as Howard University since any investment earnings on the funds will be shared equally.